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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,473	09/18/2000	Hugh Sharkey	17616-842	6257
23715	7590	12/21/2005	EXAMINER	
JOEL R. PETROW SMITH & NEPHEW, INC. 1450 BROOKS ROAD MEMPHIS, TN 38116			SHAY, DAVID M	
			ART UNIT	PAPER NUMBER
			3735	

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.		Applicant(s)	
	09/664,473		SHARKEY ET AL.	
	Examiner		Art Unit	
	david shay		3735	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on November 22, 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 57-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 57-67 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant argues that the use of the term “joining” precludes reading the claim on Anderson et al, as Anderson et al teach modifying tissue by connecting connective tissue which has been severed. The examiner must respectfully disagree. While it is true that the phrase “capsular tissue naturally joining portions of a body” can be interpreted as -- capsular tissue which is naturally joining portions of a body --; it can also be interpreted as -- capsular tissue which was naturally joining portions of a body --. Thus while applicant alleges that the phrase should be interpreted as the former, the examiner counters that if this were applicant’s intent, the claim should have been crafted to read in this way. Instead applicant has submitted broader language, which the examiner must read with the broadest reasonable interpretation – that interpretation which allows the interpretation of the phrase including the past tense.

With regard to the combination rejection, applicant argues that the teachings of Anderson et al are only that RF energy can be used to weld tissue, not to shrink it. This argument must fail for several reasons. Applicant apparently postulates that the RF energy of Anderson et al would somehow lose it’ ability to heat tissue, were it used with the intention of shrinking the tissue. This assumption is untenable. Anderson et al makes it abundantly clear that the mechanism of action on the tissue which allows welding is the heating of tissue: “In further aspects of the invention, heating is achieved by electrical resistance, circulating fluid, radio frequency current, microwaves, ultrasound, or infrared or optical radiation. In addition, heating may be achieved with a laser beam, e.g., having a wavelength from 720 nm to 820 nm. When a laser is used, the method can include a further step of applying a dye, e.g., indocyanine green, to the surfaces of the first and second materials prior to heating, wherein the dye has an absorption spectrum maximum corresponding to a wavelength of the laser beam.” (see Anderson et al, column 3, lines

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10-19, emphasis added). This is coincidentally the very same mechanism used to induce collagen shrinkage in Sand: “In the present invention, the desire is to heat selected areas of collagen tissue to shrinkage levels” (see column 6, lines 34-35, emphasis added). As applicant has provided no showing that the collagenous tissue, which is heated to the melting temperature by RF energy, would suddenly cease to be heated thereby when heating for shrinkage, as taught by Sand et al, this argument is not convincing.

The rejection of claim 67, which was erroneously omitted from the previous rejection, has been included.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 57-62 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Anderson (5,571,216).

Welding tissue together will change its geometrical configuration. When the probe is inserted into the tissue it is considered deflected.

Claims 57 and 61-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sand ('709) in combination with Anderson ('216). Sand ('709) teaches a method such as claimed except the use of RF, use of painting strokes, and use on patellar tendons per se. Anderson ('216) teaches equivalence of RF energy and laser energy for heating tissue. It would have been obvious to artisan of ordinary skill to employ RF energy in the method of Sand ('709) since this is not critical and these are equivalent for tissue heating, as taught by Anderson ('216) to employ the method on patellar tendons, since Sand ('709) does not discuss avoiding these structures when heating tendons attaching the long bones; to employ a painting motion, since this

would allow a substantial length of the tendon to be treated all at once, and to deflect the probe, as taught by Anderson et al, since Sand ('709) teaches no particular technique to reach the internal tissues which are contemplated to be treated, and since this is not critical, thus producing a method such as claimed.

Claim 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sand ('709) in combination with Anderson ('216) as applied to claims 57 and 61-66 above, and further in view of Makower et al. Makower et al teach the desirability of insulating tissue that is not desired to be affected by the heat application. It would have been obvious to the artisan of ordinary skill to insulate portions of the tissue which are not desired to be affected since this would prevent undesirable heating in the tissue, thus producing a method such as claimed.

Applicant's arguments filed November 22, 2005 have been fully considered but they are not persuasive. The arguments are not persuasive for the reasons set forth above.

Applicant's arguments with respect to claim 67 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

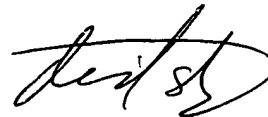
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to david shay whose telephone number is (571) 272-4773. The examiner can normally be reached on Tuesday through Friday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ali Imam, can be reached on Monday, Tuesday, Wednesday, and Thursday at (571) 272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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